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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,095	12/12/2006	Willem Frederik van den Bosch	069818-3500	4048
22428 7590 07/09/2009 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER PEPITONE, MICHAEL F	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 07/09/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,095	<b>Applicant(s)</b> VAN DEN BOSCH ET AL.	
	<b>Examiner</b> MICHAEL PEPITONE	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Pillet (US 3,887,669).

Regarding claim 29: Pillet teaches a dental composition (2:60-3:12) comprising an  $\alpha$ - $\omega$ -dihydroxypolydimethylsiloxane oil (2:60-3:12).

Claim 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Pillet (US 3,887,669).

Regarding claim 30-31: Pillet teaches a dental composition {prostheses} (2:29-32; 2:60-3:12) comprising an  $\alpha$ - $\omega$ -dihydroxypolydimethylsiloxane oil (2:60-3:12).

Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Pollak (US 4,449,983).

Regarding claim 29: Pollak teaches an endodontic sealing composition (abstract) containing a low viscosity hydroxyl terminated polydimethylsiloxane (3:25-45; 4:45-5:5),

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wherein the endodontic composition is mixed with a filler and injected into the root canal (3:67-4:2; 7:45-60; 9:15-25).

Claims 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Pollak (US 4,449,983).

Regarding claims 30-31: Pollak teaches an endodontic sealing composition (abstract) containing a low viscosity hydroxyl terminated polydimethylsiloxane (3:25-45; 4:45-5:5), wherein the endodontic composition is mixed with a filler and injected into the root canal (3:67-4:2; 7:45-60; 9:15-25).

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 14-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollak (US 4,449,983) in view of Mitra (US 2003/0087986).

Regarding claims 14 and 20-24: Pollak teaches a method of sealing a root canal wherein an endodontic sealing composition (abstract) containing a low viscosity hydroxyl terminated polydimethylsiloxane (3:25-45; 4:45-5:5) is mixed with filler and injected into the root canal (3:67-4:2; 7:45-60; 9:15-25).

Pollack does not teach the endodontic composition comprising glass ionomer cement. However, Mitra teaches a glass ionomer cement composition for use as in endodontic restorations (¶ 2, 30) wherein the glass ionomer cement comprises: a liquid portion containing

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polymeric acids; and a powdered portion containing fluoroaluminosilicate glass having an average particle diameter of about 0.2 to 15  $\mu\text{m}$  [instant claim 21] (§ 19) which was surface treated with an acid washing {ascorbic acid, tartaric acid {poly acid}, (then acetic acid, pH 3.01)} [instant claim 20-24] and dried (§ 19, 33); the powdered and liquid portion were mixed and cured (§ 35). Mitra teaches the glass ionomer cement can be provided in the form of {ground} preformed cured articles (§ 31). Pollack and Mitra are analogous art because they are concerned with a similar technical difficulty, namely the preparation of endodontic compositions. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined ground preformed cured glass ionomer cement articles comprising fluoroaluminosilicate glass, as taught by Mitra in the invention of Pollack as a filler material, and would have been motivated to do so since Mitra suggests that such glass ionomer cements provide high fluoride release and cariostatic activity (§ 4, 14, 25).

Regarding claims 15-19: Pollak teaches linear hydroxyl terminated polydimethylsiloxane (3:25-45; 4:45-5:5) having viscosities of 600 to 6000 cSt at 20 °C {600-800 cSt preferred} (4:45-5:5).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pollak (US 4,449,983) in view of Mitra (US 2003/0087986).

Regarding claim 25: Pollak teaches a method of sealing a root canal wherein an endodontic sealing composition (abstract) containing a low viscosity hydroxyl terminated polydimethylsiloxane (3:25-45; 4:45-5:5) is mixed with filler and injected into the root canal (3:67-4:2; 7:45-60; 9:15-25).

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Pollack does not teach the endodontic composition comprising glass ionomer cement. However, Mitra teaches a glass ionomer cement composition for use as in endodontic restorations (§ 2, 30) wherein the glass ionomer cement comprises: a liquid portion containing polymeric acids; and a powdered portion containing fluoroaluminosilicate glass having an average particle diameter of about 0.2 to 15  $\mu\text{m}$  (§ 19); the powdered and liquid portion were mixed and cured (§ 35). Mitra teaches the glass ionomer cement can be provided in the form of {ground} preformed cured articles (§ 31). Pollack and Mitra are analogous art because they are concerned with a similar technical difficulty, namely the preparation of endodontic compositions. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined ground preformed cured glass ionomer cement articles comprising fluoroaluminosilicate glass, as taught by Mitra in the invention of Pollack as a filler material, and would have been motivated to do so since Mitra suggests that such glass ionomer cements provide high fluoride release and cariostatic activity (§ 4, 14, 25).

Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollak (US 4,449,983) in view of Mitra (US 2003/0087986).

Regarding claims 26-28: Pollak teaches a method of sealing a root canal wherein an endodontic sealing composition (abstract) containing a low viscosity hydroxyl terminated polydimethylsiloxane (3:25-45; 4:45-5:5) is mixed with filler and injected into the root canal (3:67-4:2; 7:45-60; 9:15-25).

Pollack does not teach the endodontic composition comprising glass ionomer cement. However, Mitra teaches a glass ionomer cement composition for use as in endodontic

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restorations (§ 2, 30) wherein the glass ionomer cement comprises: a liquid portion containing polymeric acids; and a powdered portion containing fluoroaluminosilicate glass having an average particle diameter of about 0.2 to 15  $\mu\text{m}$  (§ 19); the powdered and liquid portion were mixed and cured via applying heat {part of a tri-cure mechanism} (§ 30-35). Mitra teaches the glass ionomer cement can be provided in the form of {ground} preformed cured articles (§ 31). Pollack and Mitra are analogous art because they are concerned with a similar technical difficulty, namely the preparation of endodontic compositions. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined ground preformed cured glass ionomer cement articles comprising fluoroaluminosilicate glass, as taught by Mitra in the invention of Pollack as a filler material, and would have been motivated to do so since Mitra suggests that such glass ionomer cements provide high fluoride release and cariostatic activity (§ 4, 14, 25).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

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with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 14, 20, and 29-31 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 9, and 11-14 of copending Application No. 10/559900. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed process of preparing the FAS glass and poly(diakylsiloxane) composition, as well as the bone cement and dental filling compositions overlap in scope.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See attached form PTO-892.

### ***Response to Arguments***

Applicant's arguments with respect to claims 14-31 have been considered but are moot in view of the new ground(s) of rejection.

Mitra (US 2003/0087986) was relied on as a secondary reference disclosing a glass ionomer cement composition for use as in endodontic restorations (§ 2, 30) comprising: a liquid portion containing polymeric acids; and a powdered portion containing fluoroaluminosilicate glass having an average particle diameter of about 0.2 to 15  $\mu\text{m}$  (§ 19).



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***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PEPITONE whose telephone number is (571)270-3299. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MFP  
1-July-09

/Harold Y Pyon/  
Supervisory Patent Examiner, Art Unit  
1796